

## S.0 SUMMARY

### S.1 INTRODUCTION

This Draft Environmental Impact Report/Environmental Impact Statement (DEIR/EIS) identifies the purpose and need for the State Route 22/West Orange County Connection (SR-22/WOCC), describes the alternatives being considered to address the purpose and need, and documents the potential environmental effects of these alternatives pursuant to the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA). This DEIR/EIS is divided into two volumes: Volume I, which includes the analysis, and Volume II, which includes public scoping meetings minutes, and public notices. Technical reports are under separate cover.

SR-22 is an existing six-lane freeway in Orange County that provides connections to five major freeways: Interstate 605 (I-605), Interstate 405 (I-405), Interstate 5 (I-5), State Route 57 (SR-57), and State Route 55 (SR-55). Built in the 1960s, SR-22 is one of only two east/west freeways in Orange County. As a result of its unique orientation, it crosses most of the major north/south arterial corridors in the central county and, consequently, has become a vital link in providing mobility to Orange County residents, workers, and visitors.

The SR-22 West Orange County Connection project length is approximately 21 kilometers (13 miles) and extends from I-605 to SR-55. The SR-22/West Orange County Connection passes through seven jurisdictions. From west to east along SR-22, these jurisdictions are: Los Alamitos, Orange County (unincorporated community of Rossmoor), Seal Beach, Westminster, Garden Grove, Santa Ana, and Orange. The study area is also located immediately adjacent to Tustin.

The following are the locations of the proposed SR-22 WOCC improvements project:

12 ORA-5 KP/(PM) R53.6/R54.5(33.32/33.85)  
12 ORA-22 KP/(PM) R1.1/21.2(0.66/13.17)  
12 ORA-55 KP/(PM) R20.5/22.0(12.71/13.70)  
12 ORA-405 KP/(PM) R33.1/38.6(20.56/23.98)  
12 ORA-605 KP/(PM) R0.0/1.6(0.0/1.0)

The lead agencies for this environmental review are the California Department of Transportation (Caltrans) for the CEQA documentation (EIR) and the Federal Highway Administration (FHWA) for the NEPA documentation (EIS). The Orange County Transportation Authority (OCTA) is a responsible agency under CEQA, and is a co-applicant with Caltrans for Transportation Congestion Relief Program (TCRP) funding.

The State Route 22 (SR-22)/West Orange County Connection project alternatives involve transportation improvements to the SR-22 corridor, including portions of I-405 and I-605. Four alternatives are currently under consideration: No Build Alternative, Transportation System Management/Expanded Bus Service Alternative, Full Build Alternative, and Reduced Build Alternative. Potential transportation improvements considered as part of the SR-22/West Orange County Connection project include:

- a new High Occupancy Vehicle (HOV) lane in both directions between I-405 and SR-55
- an additional HOV lane in both directions of I-405 between I-605 and SR-22
- direct freeway-to-freeway HOV connectors between
  - I-605 and I-405 (both directions)
  - I-405 and SR-22 (both directions)
  - Eastbound SR-22 and southbound I-5
  - Northbound I-5 and westbound SR-22
  - Eastbound SR-22 and northbound SR-55
  - Southbound SR-55 and westbound SR-22
- a continuous auxiliary lane in both directions of SR-22 between Beach Boulevard and I-5

- a new limited-access arterial branching south from SR-22 along the former Pacific Electric right-of-way to central Santa Ana

### **S.1.1 CURRENT OPERATING HOV FACILITIES IN ORANGE COUNTY**

HOV lanes are currently available on all freeways in Orange County with the exception of SR-22.

In November 1985, SR-55 became the first freeway in Orange County to dedicate one lane of traffic in each direction to high occupancy vehicles (HOVs). The HOV lanes extend 11.6 miles in each direction for a total of 22.6 miles of HOV lanes on SR-55.

On SR-57, there is a total of 23.4 miles of dedicated HOV lanes which were opened in two phases. The portion extending from the I-5/SR-22/SR-57 interchange to Lambert Road opened in June 1992. In August 1997 the HOV lanes in each direction were extended to the Los Angeles County Line.

On I-405, four phases of HOV lanes have been opened over a span of nine years. The first segment from I-5 to SR-73 opened in May 1989. Three months later, the second segment from SR-73 to the I-405/I-605 separation opened. By the time the fourth segment was completed in October 1998, a total of 48.6 miles of HOV lanes were added to I-405.

In October 1992, drivers of HOV vehicles began taking advantage of HOV lanes on I-5. A seven-mile HOV lane in each direction remained the only segment on the Interstate for four years until subsequent segments opened in May and July 1996. Two more segments followed and the HOV lanes were completed in September 2000. I-5 has a total of 69.6 miles of HOV lanes.

### **S.2 PURPOSE OF THE DEIR/EIS**

The goals of the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA) are to assure that governmental actions or activities promote the general welfare, to allow people and nature to live in productive harmony, and to fulfill the social, economic, and environmental requirements of present and future generations. Under CEQA, an Environmental Impact Report (EIR) is prepared when a project may have impacts to the environment that cannot be mitigated below the thresholds of significance. An Environmental Impact Statement (EIS) is prepared under NEPA to address the environmental impacts which are likely to result from implementation of the Federal action and to consider reasonable mitigation for adverse impacts. The DEIR/EIS is distributed to the public, potentially affected agencies, and other interested parties. Following an opportunity for the public, agencies, and interested parties to comment, a Final EIR/EIS (FEIR/EIS) would be prepared, which incorporates responses to all comments received and identifies the lead agency's Preferred Alternative.

Although CEQA and NEPA share many similarities, there are differences between them that would have to be satisfied for this joint environmental document. CEQA has thresholds of significance, to be used as bases for determining mitigation. NEPA determines level of significance based on context and intensity. Under NEPA, all impacts are discussed regardless of any thresholds amount and include mitigation measures where reasonable.

This DEIR/EIS is organized in a manner that satisfies both CEQA and NEPA regulations. The "Summary of Impacts Table (S.5-1)" in the Summary (S.0) section describes the impacts to environmental resources for each alternative (No Build, TSM/Expanded Bus Service, Full Build and Reduced Build). The "Impact" and "Mitigation" columns in the Summary of Impacts Table discuss environmental issues to comply with CEQA and NEPA. The "Level of Significance after Mitigation (CEQA only)" column discusses specifically the level of significance for CEQA compliance. Section 4.0, titled "Environmental Consequences", is divided into fifteen subsections, one for each affected environment such as air quality, cultural resources, and hazardous waste. This section discusses impacts to environmental resources for all alternatives un-

der consideration and describes mitigation measures. Under each subsection, there are separate discussions on level of significance for the CEQA process.

### **S.3 PURPOSE AND NEED FOR THE PROJECT**

The purpose of the proposed SR-22/West Orange County Connection project is to improve both existing and future mobility and enhance safety throughout the corridor while minimizing environmental and economic impacts. The study area includes SR-22, bounded by SR-55 and the Los Angeles county line and the interchanges between SR-22 and the connecting freeways within these same boundaries.

The project seeks to accomplish the following goals:

- Improve mobility and reduce congestion in the SR-22/West Orange County Connection study area
- Maximize cost-effectiveness of the SR-22/West Orange County Connection improvements
- Minimize adverse and maximize beneficial environmental impacts to SR-22/West Orange County Connection communities
- Minimize negative and maximize positive economic impacts to SR-22/West Orange County Connection communities

Currently, the SR-22 corridor has insufficient capacity on both the freeway and major adjacent surface streets to handle existing and projected 2020 travel demand between the SR-55 interchange and the Los Angeles County line, and to and from destinations within the proposed project area. The situation is aggravated by a lack of continuous parallel arterial routes and available arterial/intersection capacity. There is little incentive or opportunity for individual drivers to switch from single-occupancy vehicles (SOVs) to carpooling or transit without dedicated facilities for this purpose. That is, if SOV drivers cannot decrease their commute times because there are no dedicated lanes for high-occupancy vehicles (HOVs) or buses only, they are more likely to forego carpooling or using transit in favor of driving alone. In addition, there are no major programs in the SR-22 corridor to implement Transportation System Management (TSM), Transportation Demand Management (TDM), and Intelligent Transportation System (ITS) strategies.

With projected population and employment growth trends indicating increased transportation volumes, this situation is expected to worsen. The proposed SR-22/West Orange County Connection improvements are anticipated to provide a higher level of operation for existing and anticipated traffic volumes by incorporating up-to-date technological traffic control systems and other transportation improvements, and offering additional travel mode choices.

Section 1.0 of this document includes further information about the SR-22/West Orange County Connection purpose and need.

### **S.4 PROJECT ALTERNATIVES**

During the Major Investment Study (MIS) process for the SR-22/West Orange County Connection project, an extensive number and variety of potential transportation strategies for addressing the project's purpose and needs were evaluated and screened until the remaining four alternatives were carried forward for analysis in this document. These four alternatives are briefly described below and are described in more detail in Section 2.0, which also covers the alternative screening process. The entire alternative screening process is documented in the MIS (available at Caltrans, OCTA, and major libraries).

#### **S.4.1 No Build Alternative**

Both CEQA and NEPA require environmental documents to consider a no-action or no-project alternative. This alternative represents the status quo, or what would happen if none of the project elements included in the other alternatives were implemented. The No Build Alternative for the SR-22/West Orange County Connection project represents the future baseline condition in the year 2020. The No Build Alternative encompasses only improvements to the transportation network that have already been approved and funded. No capital improvements for SR-22 are included under this alternative. The No Build Alternative incorporates all of the elements of the OCTA 1998 *FastForward* Long-Range Transportation Plan (FFTP)

Baseline Scenario. The FFTP Baseline Scenario also includes the 1995 Combined Transportation Funding Program (CTFP) data. In addition, the No Build Alternative includes all city or developer projects not in the 1995 CTFP that have been approved and funded. Throughout this document, the other project alternatives are compared to this No Build Alternative as a baseline condition.<sup>2</sup>

Also included in the No Build Alternative are all of the elements of the No Build and Transportation System Management (TSM) alternatives defined in OCTA's *The Corridor Major Investment Study Final Evaluation Report*, which was adopted by the OCTA Board on June 9, 1997.<sup>3</sup> Descriptions of these elements are contained in the *MIS Evaluation Report*. The No Build Alternative represents the existing highway, HOV, bus, fixed guideway, and Advanced Transportation Systems (ATS), plus all transportation improvements programmed to be implemented by 2020, as outlined in OCTA's FFTP Baseline Scenario. On February 12, 2001, SCAG released a Letter of Completion for the SR-22 West Orange County Connection Final MIS. According to the SCAG letter, "the range of alternatives studied in the SR-22 West Orange County Connection Final MIS Evaluation Report is sufficient to meet the requirements of the regionally significant transportation investments study (RSTIS) guidelines. Adequate public involvement was utilized in the planning process through workshops and public hearings. Moreover, public agency involvement was facilitated by numerous meetings and RSTIS Peer Review Group Meetings."

#### **S.4.2 TSM/Expanded Bus Service Alternative**

The TSM/Expanded Bus Service Alternative includes all of the improvements outlined in the No Build Alternative, such as OCTA's FFTP Baseline Scenario and the No Build and TSM alternatives. In conjunction with these improvements, the TSM/Expanded Bus Service Alternative incorporates additional TSM and transit service strategies in the SR-22 corridor, such as more buses, extended routes, and shorter headways (less time between buses). The TSM alternative represents implementation of lower-cost capital improvements, such as increased bus service with associated arterial improvements. The TSM/Expanded Bus Service Alternative does not include any capital improvements to SR-22.

#### **S.4.3 Full Build Alternative**

The Full Build Alternative includes all of the elements contained in the No Build and TSM/Expanded Bus Service Alternatives, as well as specific elements that address HOV system connectivity. This alternative would add an HOV lane in each direction on SR-22. The SR-22 HOV connectors were added September 1997 with the expansion of the project, which included the West Orange County Connection. This element was incorporated in response to public outreach, which identified HOV system completion as a high priority. HOV connectors, in particular, were perceived as important, especially in regards to the safety and efficiency of the system. The HOV connectors allows the system to accommodate long distance travel for carpools and buses, while enabling the smooth flow of vehicles between freeways to avoid chokepoints at major interchanges. It would also provide an additional HOV lane in each direction on I-405 between I-605 and SR-22. It would provide direct freeway-to-freeway HOV connectors between I-605 and I-405, between I-405 and SR-22, between SR-22 and I-5, and between SR-22 and SR-55. The Full Build Alternative would also construct a new arterial in the former Pacific Electric right-of-way in Garden Grove and Santa Ana, on land currently owned by OCTA. This arterial, which would connect SR-22 with both Santa Ana Boulevard and Civic Center Drive, would provide direct access to and from SR-22 and downtown Santa Ana. The Full Build Alternative also includes selected design improvements to enhance the operational characteristics of the SR-22 facility in certain locations that currently create bottlenecks for motorists. These include elements such as interchange spacing, shoulder widths, and median widths that must be approved by Caltrans. Under the Full Build Alternative, the freeways within the SR-22/West Orange County Connection project would maintain standard lane widths with some exceptions to advisory and mandatory design standards such as interchange spacing, shoulder widths, and median widths that must be approved by Caltrans.<sup>4</sup>

<sup>2</sup> Both the FFTP and CTFP are available at OCTA.

<sup>3</sup> Discussion of the MIS is in Section 1.2.7. *The Corridor MIS Final Evaluation Report* is available at OCTA.

<sup>4</sup> The Full Build Alternative is referred to as the "Build Alternative" in the technical reports, which were prepared before the development of the Reduced Build Alternative. The Reduced Build Alternative is addressed in addenda to each technical report.

#### **S.4.4 Reduced Build Alternative**

The Reduced Build Alternative includes all of the elements contained in the No Build and TSM/Expanded Bus Service Alternatives, as well as some of the elements of the Full Build Alternative. The Reduced Build Alternative was created by eliminating certain elements of the Full Build Alternative from the project design. The three major elements not included in the Reduced Build Alternative are the new arterial in the former Pacific Electric right-of-way, the HOV connectors between SR-22 and I-5, and the HOV connectors between SR-22 and SR-55. These elements were eliminated to reduce environmental impacts related primarily to right-of-way acquisition. The Reduced Build Alternative also includes selected design improvements to enhance the operational characteristics of the SR-22 facility in certain locations as described in the Full Build Alternative. The horizontal alignment of the Reduced Build Alternative varies slightly from the Full Build Alternative in the eastern Garden Grove/western Orange area.

#### **S.5 PROJECT IMPACTS/MITIGATION**

Table S.5-1 summarizes the potential environmental impacts anticipated for each alternative of the proposed project, organized by topic and alternative. These topics are fully discussed in Sections 3.0 and 4.0, and in the technical analyses. The proposed SR-22 West Orange County Connection project has potential community (right-of-way), cultural, noise, and visual environmental impacts. The community impacts would generally be addressed with relocation assistance. Impacts to cultural resources are relative to the Pacific Electric (PE) Arterial in the Full Build Alternative. The noise impacts would be addressed with the implementation of noise barriers. The removal of existing vegetation would be associated with visual impacts, and all efforts would be made to preserve existing landscaping. Where possible, new landscaping would be placed where it can be sufficiently maintained and irrigated. These impacts long their mitigation measures are further discussed in Section 4.0 of the DEIR/EIS and the technical reports.

Recognizing that this project is in response to the increased demands placed on the SR-22 both by local land use development as well as by regional demands for an east-west corridor, the impacts that it may cause are more than balanced by the benefit it is providing. Additionally, construction of the proposed SR-22 HOV connectors would improve east-west mobility between Orange and Los Angeles Counties, thereby indirectly improving mobility on other freeways such as I-5, I-405, I-605, SR-55, and SR-57 that connect to the SR-22 freeway.

#### **S.6 COORDINATION WITH RESOURCE AGENCIES**

One of the goals of CEQA/NEPA is to ensure early coordination and consultation with resource agencies. Depending on the environmental impacts to a resource, one or several resources agencies may be contacted during the environmental document phase for consultation to address potential project impacts to resources. If the resource agency determines an impact to its resources, the project proponent may be required to obtain applicable permits. Although the permit process may not occur until a later phase in the project, early coordination is required. This would allow the project proponent and the resources agency to determine the required permit(s) and methods to minimize the potential impacts to the resources.

During the early phase of the SR-22 WOCC proposed project, Caltrans initiated coordination with several resources agencies to determine the possible required permits. The regulatory agencies were contacted as part of the coordination and consultation efforts:

- A. U.S. Fish and Wildlife Service (USFWS): As part of the coordination and consultation efforts, in June 2000 Caltrans contacted USFWS requesting information on sensitive/listed species that potentially occur within the limits of the SR-22/West Orange County Connection study area.
- B. California Department of Fish and Game (CDFG): A Section 1601 Streambed/Lake Alteration Agreement from CDFG may be required if there is diversion or obstruction in the natural flow or change of the bed, channel, or bank of any river, stream, or lake, or use of any material from a streambed, designated by the Department as an existing fish or wildlife resource.

- C. U.S. Army Corps of Engineers (ACOE): Caltrans, OCTA, and the SR-22/West Orange County Connection consultants have informally consulted with the Corps regarding permitting for the various project elements. Specifically, a draft NEPA/Section 404 Permit Process Determination Preliminary Information Package was prepared. The Section 404 Memorandum of Understanding (MOU) process was not applied because of the anticipated applicability of a nationwide 404 permit.
- D. State Historic Preservation Office (SHPO): Caltrans has provided the Historic Property Survey Report, Historic Architectural Survey Report, and the Negative Archaeological Survey Report to FHWA for transmittal to the State Historic Preservation Office (SHPO). The SHPO conclusion on the HPSR and Determination of Effect Finding of Adverse Effect (DOE/FOE) documentation are as follows:
- SHPO concurs with FHWA's determination that the Full Build Alternative, with its proposed Pacific Electrical Arterial component, would have an adverse effect on the Pacific Electric/Santa Ana Bridge (a National Register eligible property) if selected as the preferred alternative;
  - SHPO concurs that the Reduced Build Alternative, if selected as the preferred alternative, would have no effect on historic properties.

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